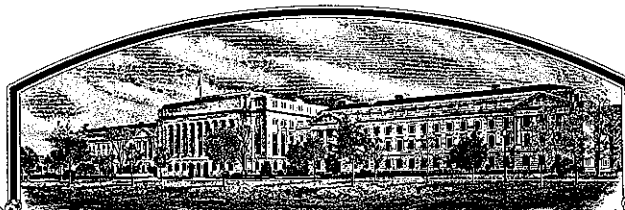


No.

9100250



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Ziller Seed Co., Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (AT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'BT 2877'

In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington, D.C.
this 30th day of December in
the year of our Lord one thousand nine
hundred and ninety-three.

Attest:

Kenneth H. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Mike Egan
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

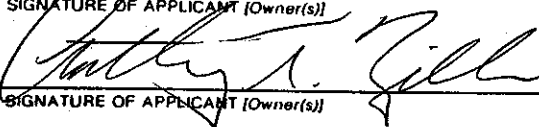
1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Ziller Seed Farms, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.	3. VARIETY NAME BT 2877
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) Route 1, Box 122 Bird Island, MN 55310		5. PHONE (include area code) 612/365-3674	FOR OFFICIAL USE ONLY PVPO NUMBER 9100250 F I L I N G Date Aug. 23, 1991 Time <input type="checkbox"/> A.M. <input type="checkbox"/> P.M. F E E S Filing and Examination Fee: \$ 2150.00 Date August 23, 1991 R E C E I V E D Certificate Fee: \$ 250.00 Date Dec. 3, 1993
6. GENUS AND SPECIES NAME Glycine max L.	7. FAMILY NAME (Botanical) Leguminosae		
8. CROP KIND NAME (Common Name) Soybean	9. DATE OF DETERMINATION January 1987		
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation		12. DATE OF INCORPORATION February 1970	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Minnesota			
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Anthony T. Ziller Ziller Seed Farms, Inc. Route 1, Box 122 Bird Island, MN 55310 PHONE (include area code): 612/365-3674			
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse) a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety. b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement. c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of Variety. d. <input type="checkbox"/> Exhibit D, Additional Description of Variety. e. <input checked="" type="checkbox"/> Exhibit E, Statement of the Basis of Applicant's Ownership. f. <input checked="" type="checkbox"/> Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office _____ g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States."			
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.) <input type="checkbox"/> YES (If "YES," answer items 16 and 17 below) <input checked="" type="checkbox"/> NO (If "NO," skip to item 18 below)			
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S. <input type="checkbox"/> YES (If "YES," through <input type="checkbox"/> Plant Variety Protection Act <input type="checkbox"/> Patent Act. Give date: _____) <input checked="" type="checkbox"/> NO			
19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> YES (If "YES," give names of countries and dates) <input checked="" type="checkbox"/> NO			
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) 		CAPACITY OR TITLE President	DATE 8/20/91
SIGNATURE OF APPLICANT (Owner(s))		CAPACITY OR TITLE	DATE

Exhibit A

Origin and Breeding History: BT 2877

'BT 2877' is a soybean cultivar derived from a cross of 'Beeson' * 'Williams 79' by the pedigree method of breeding.

<u>Generation</u>	<u>Step</u>	<u>Year</u>
F0	Handcross	1981
F1	F1 Growout	1981W1
F2	Selection	1981W2
F3	Selection	1982
F4	Selection	1983
F5	Yield Test	1984
F6	Yield Test	1985
F7	Yield Test	1986
F8	Yield Test	1987
	Increase	
F9	Yield Test	1988
	Increase	
F10	Yield Test	1989
F11	Yield Test	1990
F12	Yield Test	1991
	Increase	

Observations indicate that 'BT 2877' is uniform and stable within commercially acceptable limits. As is true with other soybean varieties, a small percentage of offtypes or variants can occur within commercially acceptable limits for almost any characteristic during the course of repeated multiplication.

Exhibit B

Novelty Statement: BT 2877

'BT 2877' is most similar to 'Hardin'. The main difference between 'BT 2877' and 'Hardin' include, but are not necessarily restricted to the following:

1. 'BT 2877' has tawny pubescence, whereas 'Hardin' has gray pubescence.
2. 'BT 2877' has a ^{RWS 10-27-93} ~~red~~ brown hilum, whereas 'Hardin' has a yellow hilum.
3. 'BT 2877' has white flower color, whereas 'Hardin' has purple flower color.

U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 LIVESTOCK, MEAT, GRAIN & SEED DIVISION
 PLANT VARIETY PROTECTION OFFICE
 BELTSVILLE, MARYLAND 20705

EXHIBIT C
 (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY
 SOYBEAN (*Glycine max* L.)

NAME OF APPLICANT(S) Ziller Seed Farms, Inc.	TEMPORARY DESIGNATION	VARIETY NAME BT 2877
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) Rt. #1, Box 122 Bird Island, MN 55310		FOR OFFICIAL USE ONLY PVPO NUMBER 9100250

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,).

1. SEED SHAPE:



1 = Spherical (L/W, L/T, and T/W ratios = ≤ 1.2)
 3 = Elongate (L/T ratio > 1.2 ; T/W = ≤ 1.2)

2 = Spherical Flattened (L/W ratio > 1.2 ; L/T ratio = ≤ 1.2)
 4 = Elongate Flattened (L/T ratio > 1.2 ; T/W > 1.2)

2. SEED COAT COLOR: (Mature Seed)

1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other (Specify) _____

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

4. SEED SIZE: (Mature Seed)

Grams per 100 seeds

5. HILUM COLOR: (Mature Seed)

1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = Other (Specify)
~~Red~~ Brown

6. COTYLEDON COLOR: (Mature Seed)

1 = Yellow 2 = Green

7. SEED PROTEIN PEROXIDASE ACTIVITY:

1 = Low 2 = High

8. SEED PROTEIN ELECTROPHORETIC BAND:

1 = Type A (SP^{1a}) 2 = Type B (SP^{1b})

9. HYPOCOTYL COLOR:

1 = Green only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
 3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')
 4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

10. LEAFLET SHAPE:

1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other (Specify) _____

11. LEAFLET SIZE:

☐ 21 = Small ('Amsoy 71'; 'A5312')
3 = Large ('Crawford'; 'Tracy')

2 = Medium ('Corsoy 79'; 'Gasoy 17')

12. LEAF COLOR:

☐ 21 = Light Green ('Weber'; 'York')
3 = Dark Green ('Gnome'; 'Tracy')

2 = Medium Green ('Corsoy 79'; 'Braxton')

13. FLOWER COLOR:

☐ 1

1 = White

2 = Purple

3 = White with purple throat

14. POD COLOR:

☐ 1

1 = Tan

2 = Brown

3 = Black

15. PLANT PUBESCENCE COLOR:

☐ 2

1 = Gray

2 = Brown (Tawny)

16. PLANT TYPES:

☐ 21 = Slender ('Essex'; 'Amsoy 71')
3 = Bushy ('Gnome'; 'Govan')

2 = Intermediate ('Amcor'; 'Braxton')

17. PLANT HABIT:

☐ 3

1 = Determinate ('Gnome'; 'Braxton')

2 = Semi-Determinate ('Will')

3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

18. MATURITY GROUP:

☐ 0 ☐ 4

1 = 000

2 = 00

3 = 0

4 = I

5 = II

6 = III

7 = IV

8 = V

9 = VI

10 = VII

11 = VIII

12 = IX

13 = X

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

☐ 0Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)☐ 0Bacterial Blight (*Pseudomonas glycinea*)☐ 0Wildfire (*Pseudomonas tabaci*)

FUNGAL DISEASES:

☐ 0Brown Spot (*Septoria glycines*)Frogeye Leaf Spot (*Cercospora sojina*)☐ 0

Race 1

☐ 0

Race 2

☐ 0

Race 3

☐ 0

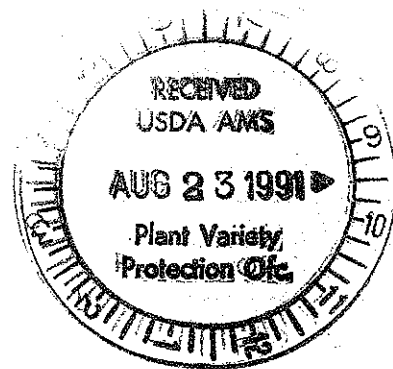
Race 4

☐ 0

Race 5

☐ 0

Other (Specify)

☐ 0Target Spot (*Corynespora cassicola*)☐ 0Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)☐ 0Powdery Mildew (*Microsphaera diffusa*)☐ 0Brown Stem Rot (*Cephalosporium gregatum*)☐ 0Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

<input type="text" value="0"/>	Pod and Stem Blight (<i>Diaporthe phaseolorum</i> var. <i>sojae</i>)												
<input type="text" value="0"/>	Purple Seed Stain (<i>Cercospora kikuchii</i>)												
<input type="text" value="0"/>	Rhizoctonia Root Rot (<i>Rhizoctonia solani</i>)												
Phytophthora Rot (<i>Phytophthora megasperma</i> var. <i>sojae</i>)													
<input type="text" value="2"/>	Race 1	<input type="text" value="2"/>	Race 2	<input type="text" value="2"/>	Race 3	<input type="text" value="1"/>	Race 4	<input type="text" value="0"/>	Race 5	<input type="text" value="0"/>	Race 6	<input type="text" value="0"/>	Race 7
<input type="text" value="0"/>	Race 8	<input type="text" value="0"/>	Race 9	<input type="text"/>	Other (Specify) _____								

VIRAL DISEASES:

<input type="text" value="0"/>	Bud Blight (Tobacco Ringspot Virus)
<input type="text" value="0"/>	Yellow Mosaic (Bean Yellow Mosaic Virus)
<input type="text" value="0"/>	Cowpea Mosaic (Cowpea Chlorotic Virus)
<input type="text" value="0"/>	Pod Mottle (Bean Pod Mottle Virus)
<input type="text" value="0"/>	Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

Soybean Cyst Nematode (<i>Heterodera glycines</i>)											
<input type="text" value="0"/>	Race 1	<input type="text" value="0"/>	Race 2	<input type="text" value="0"/>	Race 3	<input type="text" value="0"/>	Race 4	<input type="text" value="0"/>	Other (Specify) _____		
<input type="text" value="0"/>	Lance Nematode (<i>Hoplolaimus Colomus</i>)										
<input type="text" value="0"/>	Southern Root Knot Nematode (<i>Meloidogyne incognita</i>)										
<input type="text" value="0"/>	Northern Root Knot Nematode (<i>Meloidogyne Hapla</i>)										
<input type="text" value="0"/>	Peanut Root Knot Nematode (<i>Meloidogyne arenaria</i>)										
<input type="text" value="0"/>	Reniform Nematode (<i>Rotylenchulus reniformis</i>)										
<input type="text" value="0"/>	OTHER DISEASE NOT ON FORM (Specify): _____										

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input type="text" value="0"/>	Iron Chlorosis on Calcareous Soil
<input type="text" value="0"/>	Other (Specify) _____

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input type="text" value="0"/>	Mexican Bean Beetle (<i>Epilachna varivestis</i>)
<input type="text" value="0"/>	Potato Leaf Hopper (<i>Empoasca fabae</i>)
<input type="text" value="0"/>	Other (Specify) _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	_____	Seed Coat Luster	_____
Leaf Shape	_____	Seed Size	_____
Leaf Color	_____	Seed Shape	_____
Leaf Size	_____	Seedling Pigmentation	_____

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/ POD
				CM Width	CM Length	% Protein	% Oil		
BT 2877 Submitted	266	2.1	---	---	---	---	---	---	---
Hardin Name of Similar Variety	266	3.4	---	---	---	---	---	---	---

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTi-A₂ in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

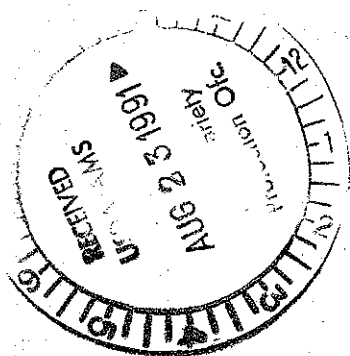


Exhibit E

Statement of basis of Applicant's Ownership: BT 2877

'BT 2877' was developed by Ziller Seed Farms, Inc.. By agreement between Ziller Seed Farms, Inc. and its employees, all rights of invention, discovery, or development made by an employee are assigned to Ziller Seed Farms, Inc.. No rights to such invention, discovery, or development are retained by any employees.